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August 14, 2001

Re: Joint Petition of the Towns of Edgartown, Harwich and Sandwich, D.T.E. 01-25

Dear Sirs:

On January 26, 2001, the Cape Light Compact ("Compact"), on behalf of the Towns of Edgartown, Harwich and Sandwich ("Towns") filed a Joint Petition with the Department of Telecommunications and Energy ("Department") pursuant to G.L. c. 164, § 34A.<sup>1</sup> The Towns sought resolution of disputes with Commonwealth Electric Company d/b/a/ NSTAR Electric

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<sup>1</sup> A municipality may acquire all or any part of the streetlighting equipment of the electric company in the municipality. G.L. c. 164, § 34A(b). When purchasing streetlights, the municipalities are required "to compensate the electric company for its unamortized investment . . . in the lighting equipment owned by the electric company in the municipality as of the date the electric company receives notice of such exercise." Id.

(“Commonwealth” or “Company”)<sup>2</sup> arising from the decision of the Towns to purchase the streetlights<sup>3</sup> currently owned by the Company. The Department docketed this matter as D.T.E. 01-25.

On April 25, 2001, the Department conducted a hearing. The Towns presented the testimony of Paul Chernick, president of Resource Insight, Inc., Cambridge, Massachusetts. Commonwealth presented the testimony of James H. Aikman, vice president of Management Resources International, Inc., Bryant K. Robinson, manager of revenue requirements for NSTAR and Commonwealth, and Michael J. Farrell, assistant controller and director of accounting for NSTAR and Commonwealth. Initial and reply briefs were submitted by the Towns and Commonwealth.<sup>4</sup>

The Towns argue that the Company’s method of determining Commonwealth’s unamortized investment (*i.e.*, cost) in the Towns’ streetlights: (1) is inconsistent with GL. c. 164, § 34A; (2) would have the Towns compensate the Company for prematurely retired streetlights that do not exist, and may never have existed in the Towns; (3) would charge the Towns for streetlights for which the Towns have already fully paid; and (4) uses depreciation rates and methods that have never been approved by the Department (Compact Brief at 1). Conversely, the Towns argue that their own proposed method: (1) is consistent with GL. c. 164, § 34A; (2) treats the Towns and the Company fairly; (3) uses DTE-approved rates of depreciation; and (4) is easy to understand and administer (Compact Brief at 9, 11-15).

Commonwealth argues that the Company’s method of determining unamortized investment is consistent with GL. c. 164, § 34A and approved accounting and rate making practices (Commonwealth Brief at 7-12). The Company also argues that the Towns’ method

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<sup>2</sup> NSTAR Electric companies also include Boston Edison Company and Cambridge Electric Light Company.

<sup>3</sup> “Streetlights” means the streetlights and all equipment integrally related to the function of such streetlight, which includes underground conduits and cables whose sole purpose is to serve such streetlights. Massachusetts Electric Company, D.T.E. 00-37, at 3-4 (2000); Massachusetts Electric Company, D.T.E. 98-69, at 18 (1999).

<sup>4</sup> On May 7, 2001, LightSmart Consulting Services (“LightSmart”) filed comments on this proceeding. On May 11, 2001, the Company objected to the LightSmart comments. Because LightSmart is not a participant in this dispute, LightSmart’s comments are beyond the scope of this proceeding. G.L. c. 164, § 34A(d) (The D.T.E. is to resolve streetlight purchase disputes between electric companies and municipalities.). Accordingly, the LightSmart comments shall not be part of the record of this proceeding.

does not fully compensate it for the value of its streetlights, leaving a shortfall that would have to be paid for by other customers (Commonwealth Reply Brief at 4).

### Commonwealth's Method

The Company defines unamortized investment as the net book value of the Company's streetlights as of the date of notice, *i.e.*, the original cost of the streetlights less the associated depreciation reserve (Tr. at 168). The Company stated that it is proposing a new method of calculating unamortized investment that differs from the method Commonwealth initially used to value streetlights in the Towns (Exh. BKR-1, at 4).<sup>5</sup> Commonwealth applied this new method to calculate its unamortized investment in the Towns' streetlights by: (1) determining the original costs of the streetlights in the Towns; (2) determining a theoretical depreciation reserve<sup>6</sup> for Commonwealth's system-wide streetlights by vintage account; (3) adjusting the theoretical reserve to equal the actual reserve for depreciation for streetlights; and (4) allocating that theoretical depreciation reserve to the existing streetlights in the Towns (Exhs. BKR-1, at 5-6; BKR-2; CLC-1-1 (Att.); CLC-1-6; CLC-1-7; CLC-2-15).<sup>7</sup> The Company's proposed purchase prices for its streetlights are as follows: \$25,453 for Edgartown; \$94,122 for Harwich; and \$29,140 for Sandwich (Exh. BKR-2).

The Company noted that under its theoretical depreciation reserve method, none of the streetlights in the Towns are deemed to be fully depreciated because the streetlights servicing all of the cites and towns in Commonwealth's service territory as a whole are not fully depreciated (Exh. JA-1, at 4-7; Tr. at 124-125, 154-156). The Company stated that if any of the

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<sup>5</sup> The Towns stated that in February, 2000, they received lower pricing proposals from the Company based on a method of calculating unamortized investment similar to that used by Boston Edison in D.T.E. 98-89 (Exh. Compact-1, atts. PLC-1, PLC-2; Exh. BKR-1, at 4-6). Commonwealth stated the method it applied to develop its February 2000 pricing proposal inappropriately computed accumulated depreciation (Exh. BKR-1, at 4-6).

<sup>6</sup> The Company employs software called "PowerPlant" to determine the theoretical reserve, which is then used to allocate the actual reserve to all the corresponding assets and vintages (Exh. CLC-1-6 (Att.)). For example, the Company stated that even if poles have an average life of 30 years, an individual pole may already be 40 years old (*id.*). Given that this pole has already lasted 40 years, its expected life is not 30 years but now may be 46 years (computed from a mortality curve) (*id.*). Thus, the Company would expect to find the pole 40/46 percent depreciated (*id.*).

<sup>7</sup> Commonwealth stated that it could not provide actual information on early retirements of streetlights in the Towns, but presents limited information concerning actual early retirements of streetlights in Harwich (Exhs. CLC-1-3; CLC-2-29).

streetlights the Towns purchase are over-depreciated, Commonwealth would apply the excess depreciation to all the other Towns (Exh. JA-1, at 7; Ech. CLC-2-15; Tr. 1, at 135-6).

The Company stated that it devised the theoretical depreciation reserve method because it accounts for its streetlights on a company-wide level, not by individual streetlight or by individual city or town, and because Commonwealth has no corresponding accumulated depreciation reserve specific to the individual Towns (Exh. JA-1, at 7; Exh. CLC-2-15; Tr.1, at 135-136). The Company stated that applying a company-wide depreciation rate to a specific property in a municipality would not compensate the Company for streetlights that may have been retired prior to the estimated average age of the Company's streetlights (Exh. BKR-1, at 5; Exh. CLC-2-25). Commonwealth asserted that it does not maintain data concerning the number and ages of streetlights that were taken out of service before they reached their average lives, or have survived longer than their average lives (Exh. CLC-2-29).

#### The Towns' Dispute

The Towns dispute the Company's method of determining "unamortized investment" and present their own method (Exhs. Compact-1; Compact-1-A). The Towns state that their proposed method requires the Towns to pay Commonwealth only that portion of Commonwealth's streetlight investment in the Towns that the Company has not already been compensated for through the rate-making process (Exhs. Compact-1, at 8-9; Compact-1-A; Tr. at 43).

The Towns calculated Commonwealth's unamortized investment in the Towns' streetlights by: (1) obtaining from the Company the original cost and year placed in service for all streetlights in the Towns, and the percentage of those streetlights serving each of the Towns versus those serving private customers; (2) depreciating each vintage group of the Towns' lights using actual depreciation rates approved by the Department; (3) assigning positive or negative dollar values to the streetlights depending on whether or not they were fully depreciated; and (4) adding these values to arrive at a unamortized investment for each of the Towns (Exhs. Compact-1, at 9; Compact-1-A; Compact-5; CLC-1-1; Tr. at 17).<sup>8</sup> Applying this method resulted in negative unamortized investment for the streetlights that serve Edgartown, Harwich, and Sandwich of \$6,735, \$104,614 and \$2,350 respectively

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<sup>8</sup> The Towns stated that they did not factor actual early retirements into their calculation because Commonwealth does not maintain that type of information (Exh. CLC-2-29; Tr. at 34-36).

(Exh. Compact-1A at 1-3). Consequently, the Towns proposed that each Town's purchase price should be zero (Exhs. Compact-1A at 1-3; Tr. at 18-21).<sup>9</sup>

### Analysis and Findings

This dispute concerns the proper method to calculate the purchase price for the streetlights the Towns want to purchase. Each Town's purchase price for the streetlights is Commonwealth's "unamortized investment" in the respective Towns' streetlights. GL. c. 164, § 34A. Unamortized investment is equal to the book value of gross plant in service, net of accumulated depreciation. Petition of the Towns of Acton and Lexington, D.T.E. 98-89, at 4 (1998). The Towns and Commonwealth request the Department resolve their dispute concerning the proper method of ascertaining unamortized investment.

In determining its unamortized investment, Commonwealth needed to calculate a depreciation reserve applicable to the streetlights to be sold. Since the Company does not compute streetlight depreciation on a unit of property basis, Commonwealth did not specifically identify the actual accumulated depreciation reserve for the streetlights in the Towns. Instead, the Company computed a theoretical depreciation reserve for Company-wide streetlights, and adjusted that theoretical depreciation reserve to equal the actual depreciation reserve for Company-wide streetlights. Commonwealth then allocated the resulting actual system-wide streetlight depreciation reserve to the Towns, and subtracted it from the original costs of the existing streetlights.

Commonwealth's proposed method allocates the Company-wide depreciation reserve, which includes early retirements, to the street lighting equipment to be sold (Tr. at 82, 137-138). In addition, under Commonwealth's method, any streetlight improvements made outside of the Towns will increase the value of street lights located in the Towns.<sup>10</sup> Moreover,

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<sup>9</sup> The Towns stated that the record is not clear if any "shortfall in system-wide unamortized costs" can be attributed to the sale of the streetlights (Exh. NSTAR-1-10). The Towns added that in Commonwealth's next rate case, Commonwealth could set rates to recover its streetlight costs, and won't be harmed in any way by the removal of the Towns' streetlights (Exh. NSTAR-1-10; Tr. at 35-36).

<sup>10</sup> For example, streetlight improvements made outside of the Towns will increase the net book value of Company-wide streetlights. Since the theoretical reserve allocation method allocates Company-wide figures to streetlights located in the Towns, the higher Company-wide net book value will produce a higher net book value (i.e. unamortized investment) for the Towns' streetlights (see Tr. at 157). The Towns would be subsidizing the cost of streetlights elsewhere on the system because the theoretical reserve allocation method increases the purchase price of the Towns' streetlights due to  
(continued...)

there can be no fully or over-depreciated individual streetlights as long as the unamortized investment in Company-wide streetlights is a positive value. Commonwealth's method is not reasonable because it: (1) automatically increases the selling price of streetlights by a cost for early retirements whether or not early retirements actually took place in the Towns; (2) causes the selling price to be influenced by factors extraneous to the Towns; and (3) does not permit over-depreciated streetlights to have a negative value. Accordingly, we do not accept Commonwealth's method of valuing the Towns' streetlights.

The Towns determined the unamortized investment of Commonwealth's streetlights by subtracting accumulated depreciation from the original cost of the existing streetlights. The Towns' method deals only with cost information specific to the Towns, rather than with Company-wide data. Moreover, the Towns' method computes, rather than allocates, accumulated depreciation for the streetlights to be sold based on depreciation rates used for ratemaking and accounting purposes. The Towns' method also permits fully-depreciated streetlights with negative values to reduce the unamortized investment of newer streetlights in ascertaining the purchase price to be paid by the acquiring municipality.

Boston Edison Company ("BECo") adopted a similar method to that used by the Towns to calculate the unamortized investment in the streetlights for the towns of Acton and Lexington, as demonstrated in Exhibit Acton/Lexington-3, tables 1-4 from D.T.E. 98-89.<sup>11</sup> In D.T.E. 98-89, BECo calculated its accumulated depreciation figure by depreciating each vintage group of streetlights using Department-approved depreciation rates for streetlights, and subtracting the cost of early retirements from the resulting accumulated depreciation figure for the towns of Acton and Lexington. The reserve was then subtracted from the original cost of the streetlights to produce the net book value. Commonwealth and the Towns referred to this method as the "Boston Edison method" (Tr. at 83-84, 138).

The Boston Edison method appropriately included a community-specific depreciation reserve to value streetlights. However, the Towns did not include treatment of the cost of early retirements in calculating the value of their streetlights in part because Commonwealth could not provide Town-specific information on those costs. Consistent with the Boston Edison method, had Commonwealth provided town-specific information on early retirements, those costs should have been factored into the calculation of the Company's unamortized investment in the Towns streetlights. In the absence of town-specific data on the cost of early retirements, unamortized investment shall be determined by subtracting the accumulated depreciation from the original

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<sup>10</sup>(...continued)

improvements outside of the Towns.

<sup>11</sup> The Department incorporates by reference into the record of this proceeding Exhibit Acton/Lexington-3, tables 1-4 from D.T.E. 98-89. 220 C.M.R. § 1.10(3).

cost of the community's streetlights being acquired.<sup>12</sup> It is not appropriate to use a system-wide depreciation reserve in the valuation of community-specific streetlights. Accordingly, we direct the Company to assign appropriate values to the Towns' streetlights based upon these findings.

Sincerely,

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James Connelly, Chairman

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W. Robert Keating, Commissioner

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Paul B. Vasington, Commissioner

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Eugene J. Sullivan, Jr., Commissioner

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Deirdre K. Manning, Commissioner

cc: Mary Cottrell, Secretary

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<sup>12</sup> The negative values that the Towns proposed indicate that the Company had more than fully recovered its investment in the Towns' streetlights (Exh. Compact-1A at 1-3). If, in fact, this is an over-recovery, it would reduce the costs that other street lighting customers must bear (Tr. at 126 ). If the Company does not fully recover its costs from the sale of its streetlights to the Towns, Commonwealth can address any under-recovery through the normal ratemaking process.